

Potent 2420-Class of Protease Inhibitors for Treatment of COVID-19

A highly efficient and scalable synthetic route utilizes inexpensive, optically active sugars to produce a high quantity of optically pure ligand for potent HIV/AIDS compounds.

Purdue University researchers have developed a series of compounds for the treatment of COVID-19, the respiratory illness caused by the SARS-CoV-2 coronavirus strain. While a few COVID-19 treatments have been approved for emergency use, such treatments are limited to patients with mild to moderate COVID-19 symptoms or disease recurrence occur after completing the treatment course. The Purdue compounds potently inhibit the SARS-CoV-2 3C-like protease (3CL-pro) and block SARS-CoV-2 replication in vitro. The researchers expect these compounds and their derivatives to possess drug-like properties.

Advantages:

- Potent inhibitor of SARS-CoV-2 3CL-pro enzyme
- Blocks SARS-CoV-2 viral replication

Applications:

- COVID-19 treatment
- Drug discovery

TRL: 2

Intellectual Property:

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Category

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Chemicals & Advanced
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